

DESCRIPTIONS OF NEW SPECIES OF AUSTRALIAN
CERAMBYCIDAE (COLEOPTERA).

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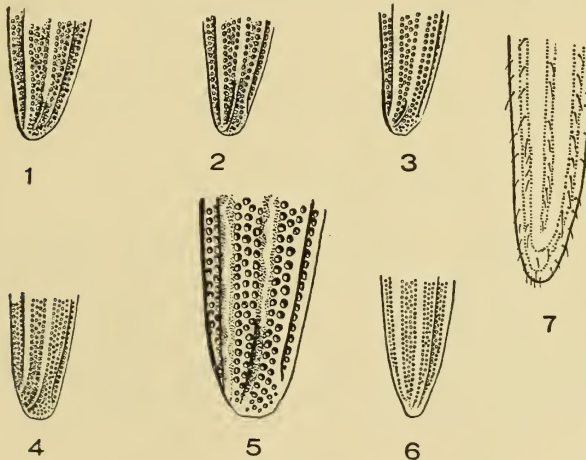
(Contribution from the Australian Museum, Sydney.)

(Plate xv. and text-figure.)

Shortly after the publication of my revision of the Australian species of the genus *Syllitus* (Rec. Aus. Mus., xx., 2, 27 August, 1937, pp. 108-116, pls. xviii-xix), I received a small collection of insects belonging to this genus from Mr. A. R. Brimblecombe, Assistant Research Officer, Department of Agriculture and Stock, Brisbane, Queensland, with the request that I should identify them. On examination I found that the collection was of exceptional interest, since the majority of the species included were apparently new to science.

Mr. Brimblecombe very kindly agreed to my suggestion that I should be permitted to describe any new species, and their descriptions together with those of several additional species from the Australian Museum Collection, and two new species of the allied genus *Aphiorhynchus*, comprise the present paper. In all ten new species are described, and one new genus defined, forming a very interesting addition to the Cerambycid fauna of Australia, and particularly in these hitherto but little collected genera, in which, no doubt, many undescribed forms still await discovery.

My sincere thanks are extended to Mr. Brimblecombe for his kindness in submitting the material to me and permitting its description, and to Miss N. B. Adams for the preparation of the plate and text-figures.



EXPLANATION OF TEXT FIGURES.

Apices of elytra: Fig. 1, *Syllitus tuberculatus* sp. nov. Fig. 2, *Syllitus araucariae* sp. nov. Fig. 3, *Syllitus dubius* sp. nov. Fig. 4, *Syllitus cassinae* sp. nov. Fig. 5, *Syllitus sinuaticosta* sp. nov. Fig. 6, *Syllitus brimblecombei* sp. nov. Fig. 7, *Syllitosimilis aberrans* sp. nov.

(N. B. Adams del.).

Genus SYLLITUS Pascoe, 1858.

SYLLITUS ARAUCARIAE *sp. nov.*

(Plate xv., fig. 4 and text fig. 2.)

♀. Slender. Head and thorax pale ochraceous, lightly rugose, semi-nitid. *Head* considerably broader than prothorax, eyes large, prominent. *Thorax* strongly constricted throughout apical third, laterally tumid at about two-thirds, constricted at base, but not so narrowly as at anterior third. *Antennae* not reaching to extremity of body, dark brown; antennary tubercles not prominent. *Elytra* dark nigro-fuscus, coarsely and regularly punctate, with lateral margin and two narrow raised costae on each elytron creamy-white, the margins of the lines irregularly indented by punctures of the inter-costal area. First pale costa longer than second, extending almost to apex; a short, strongly defined, concolorous costa extending from shoulder to about 1/7th length of elytron or less. *Lateral margin* very slightly emarginate, marked with a clear white line and terminating just before apex. First costa parallel to suture, second approximately parallel to first, converging towards apex. Area between first and second costae much more closely, finely, and irregularly punctate than that between second costa and lateral margin, where the punctures tend to be shallow, circular, and ranged in definite rows. *Legs* pale stramineous, femora and tibiae very finely punctate, with a sparse clothing of scattered whitish hairs. *Ventral surface*: Sternum dark ferruginous, abdomen black, semi-nitid, lightly punctate.

Long.: $6\frac{1}{2}$ mm.

♂. Similar to female, but smaller. *Antennae* reaching to extremity of body. Head with a small yellow patch before each eye.

Long: 5 mm.

Hab.: Imbil, Queensland. (A. R. Brimblecombe). August, 1936.*Host Plant*: Bred from *Araucaria cunninghami*.

Holotype ♀ and allotype ♂ in Queensland Museum, Brisbane.

A series of seven specimens comprising 5 ♀♀ and 2 ♂♂; the females measuring 6 mm., $6\frac{1}{2}$ mm., and 5 mm.; the males 5 mm.

SYLLITUS BRIMBLECOMBEI *sp. nov.*

(Plate xv., fig. 10 and text fig. 6.)

Moderately slender. Head and thorax dark stramineous, glabrous, nitid. *Head* medium, eyes prominent, antennary tubercles prominent. *Antennae* dark brown, clothed with a very fine ashy pubescence. *Thorax*: Anterior half cylindrical, basal half laterally roundly tuberculate, dorsally with two high rounded tubercles on disc. *Elytra* stramineous-brown, becoming darker towards apex; each elytron with lateral margin and two strong raised costae, white; a narrow, slightly elevated costa rising near shoulder and terminating at apex, slightly white on basal half, concolorous on apical half. First pale costa (subsutural) shorter than second, not reaching apex, straight and parallel to suture; second reaching apex, generally parallel to first, but diverging very slightly towards centre, and converging again sharply near apex, where it terminates on sutural line. Lateral costa somewhat strongly emarginate. Interspaces between costae rather coarsely and irregularly punctate. *Legs* light stramineous.

Long.: 8 mm.

Hab.: Brisbane Queensland, November 13, 1921.

Holotype in Queensland Museum, Brisbane.

Other specimens in the series measured 7-8 mm. in length. I believe that all the specimens examined are females.

Named in honour of Mr. A. R. Brimblecombe, Department of Agriculture and Stock, Queensland.

SYLLITUS CASSINIAE sp. nov.

(Plate xv., fig. 5 and text fig. 4.).

Very slender. Black. Head and thorax strongly rugose. *Head* small and narrow, not wider than prothorax. *Thorax* cylindrical, very slightly tuberculate laterally on posterior third. *Elytra* black suffused with a brownish tint, finely and regularly punctate; lateral margin and two raised costae on each elytron narrowly white; first (subsutural) pale costa parallel to suture, second parallel to first; a well defined concolorous raised costa extending from the shoulder to apex between second costa and lateral margin. Lateral margin narrowly white; first pale costa shorter than second; first and second costae not converging towards apex; concolorous costa converging strongly toward second near apex, then diverging sharply to lateral margin. *Antennae* black, smooth, nitid at apex of joints, becoming suffused with reddish-brown over apical third, basal joint with thin white pubescence. *Legs* black, punctate, semi-nitid.

Long.: 6 mm.

Hab.: Gore, Queensland (A. R. Brimblecombe), August, 1935.

Host Plant: Bred from Rosemary (*Cassinia laevis*).

Holotype in Queensland Museum.

An interesting species with a general resemblance to *S. uniformis* Blkb., but differing in the presence of white costae and other features.

SYLLITUS CENTOCRUS sp. nov.

(Plate xv., fig. 9.).

Robust. *Head* dark ferruginous, finely punctate. *Thorax* ferruginous, rugose, with slight rounded lateral expansions (scarcely tubercles) about basal third; two small dorsal tuberculate elevations on same area. *Elytra* bright ferruginous, almost stramineous, punctate; each elytron with lateral margin and two raised costae yellow; lateral margin only lightly and narrowly yellow, costae strong. First costa sharply divergent to suture towards centre; second costa equally divergent to lateral margin forming a wide lenticular space between the costae; the widest portion of this area is more finely punctate and definitely darker than the remainder of the elytra. A fine double costa, concolorous with elytra, runs from shoulder to apex between second costa and lateral margin. Apices narrowly tipped with black. *Antennae* dark brown, base of first joint red, basal area of succeeding joints more or less suffused with red. *Legs*: Femora black, tibiae and tarsi bright ferruginous; hind tibiae, with the exception of basal area at joint, suffused with brownish-black.

Long.: 9 mm.

Hab.: Queensland. (A. H. Elston Collection.).

Holotype in Australian Museum, Sydney.

A comparatively large pale coloured species which does not bear any resemblance to any of its congeners. It is unfortunate that the label does not bear a more definite locality.

SYLLITUS DUBIUS sp. nov.

(Plate xv., fig. 3 and text fig. 3.).

Slender. Head and prothorax bright orange-ferruginous, very lightly rugose, semi-nitid. *Head* relatively large and broad. *Thorax* cylindrical over anterior two-thirds, widening to a laterally tuberculate expansion on basal third where disc is depressed dorsally, the depression being roughly lunulate with the apices of the crescent directed forwards. *Antennae* black, somewhat nitid, not reaching to extremity of body. *Elytra* black, coarsely and regularly punctate, with lateral margin and two broad, smooth, sub-nitid raised costae of a pale stramineous colour on each elytron. First, or subsutural, pale costa parallel with suture; second diverging gradually from behind shoulder, and converging near apex; first costa longer than second, and reaching to apex of elytron. *Legs*: Femora stramineous, tibiae clouded with black tarsi tending to black. *Ventral surface*: Sternum, prosternum, and abdomen black, semi-nitid, minutely punctate, somewhat sparsely clothed with fine, short grey hairs.

Long.: $6\frac{3}{4}$ mm.*Hab.*: Brisbane, Queensland, October 22, 1929.

Holotype in Queensland Museum, Brisbane.

Other specimens in the series measure 6-6 $\frac{1}{2}$ mm. in length.

This species is close in general appearance to *S. microps* Blkb., but may be readily separated from that species by the fact that the first, or subsutural, pale costa is longer than the second.

SYLLITUS SINUATICOSTA sp. nov.

(Plate xv., fig. 6 and text fig. 5.).

Slender. Head and thorax bright ferruginous. *Head* broad, wider than thorax; two raised carinae from antennary tubercles. *Thorax* narrow, anterior half cylindrical, laterally slightly tuberculate at basal three-quarters of thoracic length, slightly rugose, semi-nitid. *Antennae* black, dull. *Elytra* black; each elytron with lateral margin and two nearly parallel, very narrow, strongly sinuate, white costae. First white costa almost reaching apex, longer than second. Interspaces between costa finely and regularly punctate. *Legs* bright yellow, third pair suffused to a slight degree with brown.

Long.: 6 mm.

Hab.: Queensland.*Host Plant*: *Cassinia* sp.

This small species is possibly the most remarkable member of the genus known to me; the costae are wholly unlike those of any other species of the group, in which they are sharply defined, or, at least, only slightly indented on the margins by the intrusion of elytral punctures. In the present species the strongly sinuate appearance of the extremely fine (almost linear) costae is not produced by the punctuation of the elytra. The sinuate effect is especially strong over the apical portion of the elytra, giving the insect, when examined under a high power of the microscope, a remarkable and beautiful appearance.

SYLLITUS TUBERCULATUS sp. nov.

(Plate xv., fig. 8 and text fig. 1.).

♀. Slender. *Head* dark ferruginous, dark brown to black over area be-

hind eyes and between junction between head and prothorax. A prominent rounded granulose tubercle placed laterally behind eye. Antennary tubercles well developed, prominent. *Thorax* dark brown, apical and basal third finely corrugated. *Elytra* black, with lateral margin of each elytron and two raised costae white. First or subsutural, costa narrowly white, generally parallel to suture, but approaching it slightly near centre; second pale costa considerably shorter than first; a narrow concolorous line extending from shoulder to apex between second costa and lateral margin, becoming more marked over apical half. Lateral margin very narrowly edged with white. Interspaces between costae finely and irregularly punctate. *Antennae* black, nitid, four apical joints with a fine greyish bloom. *Legs* ferruginous, tibiae and tarsi diluted with black.

Long.: 7 mm.

♂. Similar to female but smaller; antennae reaching to extremity of body.

Long.: 5 mm.

Hab.: Queensland, Bunya Mountain, 3 000 feet. (N. Geary). December, 1937, to January, 1938; Benarkin (H. Hacker), April 17, 1933.

Holotype ♀ and allotype ♂ in Australian Museum, Sydney.

An exceedingly interesting little species remarkable for the prominent granulose tubercle on the side of the head, a feature which renders its identification simple, since it can be detected with the aid of a medium powered lens alone. The manner in which the concolorous costa from the shoulder becomes more sharply defined as it approaches the apex, is also distinctive. Other examples in the series measure 5, 6, and 7 mm. in length.

In addition to the specimens from the Department of Agriculture and Stock, Queensland, I have a remarkably fine series of over sixty specimens before me taken by Mr. N. Geary on Bunya Mt. It is seldom that such numbers of specimens of a new species are available for examination.

Genus *APHIORHYNCHUS* Lacord, 1869.

APHIORHYNCHUS COSTATUS sp. nov.

(Plate xv., fig. 1.).

Slender, elongate. Ferruginous, elytra black with lateral margin and two raised costae white. *Head* with a rather slender elongate muzzle, pale ferruginous clouded with black on posterior lobes and narrowly along sides; extremity of body, black, nitid, first joint very elongate-clavate, longer than joints 2-4 combined, joints 3, 4, and 6 approximately equal, 5 slightly longer than 3, 4, and 6. *Thorax*, ferruginous clouded with brown, narrowly fusiform, slender, much longer than broad, strongly constricted anteriorly but gradually widening to base, slightly tumid laterally about posterior third, anterior border straight, strongly emarginate, posterior margin weakly sinuate. *Elytra* black with lateral margin and two narrow, almost parallel raised costae white; subsutural costa parallel with suture reaching apex, second approximately parallel to first not reaching apex, the lateral margin incurved abruptly and approaching first costa near apex; elytra wider at shoulders than base of prothorax, slightly constricted about anterior third, then widening somewhat before tapering to the apices about posterior fourth; interspaces between costae coarsely and regularly punctate. *Legs* long, slender, pale ferruginous.

Long.: $10\frac{1}{2}$ mm.

Hab.: Queensland, Bunya Mountain, 2,000 feet (N. Geary), December, 1937.

Holotype in Australian Museum, Sydney.

This fine insect is quite unlike any species of *Aphicrhynchus* known to me. The puncturation of the elytra together with the slender raised white costae are very similar to those of members of the genus *Syllitus* to which, apart from its very slender form, shape of head, etc., the insect bears a strong superficial resemblance.

Other examples in the series before me measure $10\frac{1}{2}$, 10, and 9 mm. in length.

APHIORHYNCHUS VERSICOLOR sp. nov.

(Plate xv., fig. 7.).

Slender. Ferruginous varied with brown and metallic blue black. *Head* produced into a broad muzzle, bright ferruginous clouded with fuscus towards base, a strong linear carina joining antennary tubercle and point of insertion of palpus on each side black; eyes large, prominent, coarsely granulate, black; palpi black; antennary tubercles small, not prominent. *Antennae* longer than body, black, nitid, apical joints slightly pruinose; first joint very elongate-clavate longer than joints 2-4 combined, 5 longer than 4, 4, and 6 about equal length. *Thorax* dark ferruginous, much longer than broad, somewhat fusiform, strongly constricted anteriorly widening gradually to posterior two-thirds where it is laterally tuberculate, then narrowing slightly to base, much wider at base than anteriorly, anterior margin straight not emarginate, posterior margin slightly procurved. *Elytra* narrow, wider than prothorax at shoulders, tapering gradually and regularly to apices, finely punctate anteriorly, more coarsely posteriorly, apices squarely truncate; each elytron with three concolorous raised costae anteriorly, four posteriorly, subsutural costa not reaching apex, second coalescing with third before apex, third rising below shoulder and reaching apex, fourth arising from about posterior third and terminating before apex; the ground colour of the elytra is yellow, with a somewhat irregular basal area, rounded posteriorly and not reaching sides, heavily clouded with rich brown extending from near base to about half-way, a broad transverse fascia of the yellow ground colour about half-way coalescing with light margins, an irregular apical patch, rounded somewhat anteriorly, of rich metallic blue-black. *Legs* very long, slender, pale ferruginous; femora black at base; tarsi clouded with black; hind tibiae clouded with brown.

Long.: 10 mm.

Hab.: Queensland, Bunya Mountain, 2-3,000 ft. (N. Geary), December, 1937.

Holotype in Australian Museum, Sydney.

This striking particoloured species comes closest to *A. divisus* Pasc., by reason of the dark apical area of the elytra, but the coloration together with other characters will serve to distinguish them. The apical dark patch in *divisus* is almost straight anteriorly. Other specimens in the series measure 9 and 10 mm.

Genus *SYLLITOSIMILIS* nov.

Head broad, rounded, and dorsally depressed; eyes large, reniform, coarsely granulate; antennary tubercles prominent. *Antennae* slender,

basal joint elongate-clavate. *Thorax* cylindrical anteriorly, laterally tuberculate-emarginate basally. *Elytra* narrow, parallel, marked with setulose costae of a lighter colour. *Legs* with clavate femora.

SYLLITOSIMILIS ABERRANS sp. nov.

(Plate xv., fig. 2 and text fig. 7.).

♀. Relatively stout; bright ferruginous. *Head* and *thorax* dark ferruginous. *Head* broad, rounded, finely granulate, depressed along clypeal suture; a deep longitudinal median groove extending from clypeal suture and terminating abruptly just before junction of head with anterior margin of prothorax; eyes large, reniform, coarsely granulate; antennary tubercles large and prominent. *Antennae* slender, bright ferruginous, finely and irregularly punctate, with short black hairs seated in punctures; reaching to extremity of body. First joint elongate-clavate, second and third of equal length, 4-8 longer than 2-3, and of equal length, 9-11 shorter, approximately equal; joints 2-11 narrowly cylindrical. *Thorax* ferruginous, considerably narrower than head, longer than broad, cylindrical, broadly tuberculate-emarginate laterally on basal half, finely rugose. *Scutellum* as broad as long, rounded behind. *Elytra* narrow, parallel-sided, tapering somewhat sharply to apices which are slightly divergent; finely and transversely rugose, ferruginous, with three very slightly raised elytral costae of a bright, rich stramineous; each costa with stout, semi-erect, backwardly-directed, pale stramineous setae placed at moderately regular intervals along its length. First, or subsutural, costa parallel to suture, second and third costae converging and coalescing at apex. Lateral margin slightly emarginate on basal fourth. *Legs* clear, pale ferruginous, femora somewhat elongate-clavate, tibiae with scattered dark hairs chiefly concentrated around apical joint.

Long.: 7 mm.

♂. Similar to female, smaller. *Antennae* longer than body.

Long.: 5 mm.

Hab.: Queensland, Enoggera (type); New South Wales, Richmond River, and National Park (allotype).

Holotype ♀ in Queensland Museum, Brisbane. Allotype ♂ in Australian Museum, Sydney.

This very interesting species was submitted from the Queensland Department of Agriculture and Stock as a *Syllitus*; other specimens in a less satisfactory state of preservation were unnamed in the Australian Museum Collection from the Richmond River and National Park, New South Wales. The insect bears a remarkably strong resemblance to a *Syllitus*, but on examination, although many of the characters agree with those of that genus, the large reniform eyes at once exclude it from that group. The setulose costae are another striking feature. On these and other characters, a new genus appears to be required for its reception. Its correct position is uncertain.

EXPLANATION OF PLATE XV.

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| Fig. 1. <i>Aphiorhynchus costatus</i> sp. n. | Fig. 6. <i>Syllitus sinuaticosta</i> sp. n. |
| „ 2. <i>Syllitosimilis aberrans</i> sp. n. | „ 7. <i>Aphiorhynchus versicolor</i> sp. n. |
| „ 3. <i>Syllitus dubius</i> sp. n. | „ 8. <i>Syllitus tuberculatus</i> sp. n. |
| „ 4. <i>Syllitus araucariae</i> sp. n. | „ 9. <i>Syllitus centocrus</i> sp. n. |
| „ 5. <i>Syllitus cassiniae</i> sp. n. | „ 10. <i>Syllitus brimblecombei</i> sp. n. |

(N. B. Adams, del.).